

1. (Currently amended) A method for automated distribution of software in a fiber optic network comprising:

(a) identifying software comprised on ~~each of a~~ plurality of firmware cards located in a multiplexor in the fiber optic network;

(b) determining whether the software comprised on ~~each of the~~ plurality of firmware cards located in the multiplexor is a prescribed software version;

(c) if the software comprised on at least one of said ~~plurality of~~ firmware cards ~~located in the multiplexor~~ is not the prescribed software version, updating the software;

(d) identifying further software comprised on at least a further firmware card located in at least one of a plurality of optical network units that are connected to the multiplexor over a fiber optic connection and that are connected to one another by an optical channel shelf provided by the multiplexor;

(e) determining whether the further software comprised on the further firmware card located in the optical network unit is a further prescribed software version; and

(f) if the further software comprised in the further firmware card ~~located in one of the plurality of network units~~ is not the further prescribed software version, updating the further software;

(g) determining whether there is another optical network unit connected to the multiplexor over a fiber optic connection;

if so, then returning to step (d); and

if not, then determining whether there is another multiplexor in the fiber optic network and, if so, repeating the method for the other multiplexor.

2. (Currently amended) The method of claim 1, wherein identifying the software comprised on ~~each of the plurality of~~ firmware cards located in the multiplexor comprises identifying a version for the software.

3. (Cancelled).

4. (Currently amended) The method of claim 1, wherein identifying the software comprised on ~~each of the plurality of~~ firmware cards located in the multiplexor comprises identifying software comprised on an optical interface unit card.

5. (Currently amended) The method of claim 1, wherein identifying the software comprised on ~~each of the plurality of~~ firmware cards located in the multiplexor comprises identifying software comprised on an optical multiplexing unit card.

6. (Previously Presented) The method of claim 1, wherein identifying the software comprised on the firmware card located in the network unit comprises identifying software comprised on an optical interface unit card.

7. (Original) A computer readable medium having computer executable instructions stored thereon for performing the method recited in claim 1.

8. (Currently amended) A method for automated distribution of software in a fiber optic network comprising:

(a) identifying software comprised in a multiplexor in the fiber optic network;

(b) identifying software comprised in a network unit connected to the multiplexor over a fiber optic connection;

(c) determining whether there is another network unit connected to the multiplexor over a fiber optic connection;

if so, then returning to step (b); and

if not, then:

determining if the software on ~~each~~the network unit is compatible with the software on the multiplexor; and

if the software on any network unit is not compatible with the software on the multiplexor, then updating the software on the network unit; and

determining whether there is another multiplexor in the fiber optic network and, if so, repeating the method for the other multiplexor.

9. (Previously Presented) The method of claim 8, wherein identifying the software comprised in the multiplexor comprises identifying the software version.

10. Cancelled.

11. (Currently amended) The method of claim 8, wherein determining if the software on ~~each~~the network unit is compatible with the software on the multiplexor comprises determining if a software version on ~~each~~the network unit is compatible with a software version on the multiplexor.

12. (Previously Presented) The method of claim 8, wherein identifying software comprised in the multiplexor comprises determining a version of software on a firmware card in the multiplexor.

13. (Previously Presented) The method of claim 12, wherein determining the version of software on the firmware card in the multiplexor comprises determining the version of software on at least one of an optical interface unit card and an optical multiplexing unit card.

14. (Previously Presented) The method of claim 8, wherein identifying the software comprised in the network unit comprises determining a version of software on a firmware card located on the network unit.

15. (Previously Presented) The method of claim 14, wherein determining the version of software on the firmware card located on the network unit comprises determining the version of software on an optical interface unit card.

16. (Original) A computer readable medium having computer executable instructions for performing the method of claim 8.

17 - 19. Cancelled.

20. (Currently amended) A system for automatically distributing software in a fiber optic network comprising:

a processor for executing computer executable instructions; and

memory for storing computer executable instructions, wherein

said memory has stored therein computer executable instructions for performing the following steps:

(a) initiating a single contact with a multiplexor in the fiber optic network;

(b) identifying software comprised on ones ~~each~~ of a plurality of firmware cards located in the multiplexor;

(c) determining whether the software comprised on ~~each of the plurality of~~ firmware cards located in the multiplexor is a prescribed software version;

(d) if the software comprised on one of said plurality of firmware cards located in the multiplexor is not the prescribed software version, updating the software;

(e) identifying software comprised on a firmware card located in a network unit connected to the multiplexor over a fiber optic connection;

(f) determining whether the software comprised on the firmware card located in the network unit is a prescribed software version; and

(g) if the software comprised in the firmware card located in one of the plurality of network units is not the prescribed software version, updating the software;

(h) determining whether there is another network unit connected to the multiplexor over a fiber optic connection;

if so, then returning to step (e); and

if not, then determining whether there is another multiplexor in the fiber optic network and, if so, repeating steps (a) through (h) for the other multiplexor.